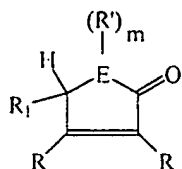


INHIBITING POLYMER OXIDATION USING NON- PHENOLIC ANTIOXIDANTS

Abstract of Disclosure

The oxidation of a polymer is inhibited by adding to the polymer about 0.005 to about 10 phr of an antioxidant having (in non-polymeric form) the general formula



The polymer can be poly(vinylchloride), a polycarbonate, a polyether, polyethylene, polypropylene, or a mixture thereof when the antioxidant is not phthalide and can be poly(vinylchloride), a polycarbonate, a polyether, or a mixture thereof when the antioxidant is

phthalide. In the formula, E is O, S, or N, R_1 is H, R' , OR' , SR' , $OP(R')_2$, or COR' , each R is independently selected from R_1 , alkylene from C_1 to C_{12} , aminoalkyl from C_1 to C_{12} , and hydroxyalkyl from C_1 to C_{12} , R' is alkyl from C_1 to C_{12} or aryl, alkylaryl, or aralkyl from C_6 to C_{12} , R'' is G, GO, GS, GNH, NHG, NHGO, NHGNH, NHGS, OG, OGO, OGNH, OGS, SGO, SGNH, or SGS, G is alkylene from C_1 to C_{12} , arylene from C_6 to C_{12} , alkylarylene from C_7 to C_{12} , or arylalkylene from C_7 to C_{12} , m is 0 if E is O or S and is 1 if E is N, and two R groups can join to form an alicyclic ring or an aromatic ring or an R group and an R_1 group can join to form an alicyclic ring.

